

U.S. Application No.: NEW
PRELIMINARY AMENDMENT

Attorney Docket: 3827.134

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A mobile ~~Mobile~~ concrete pump comprising a building frame (22) seated on a structure (12) of a truck chassis (10) and comprising two longitudinal side members (50) mutually spaced apart by a free space (52) and resting on said structure (12), for receiving a supporting device (38), a core pump (24) with material supply container (32) and functional units which form a distribution mast (36), as well as a drive assembly (42) for actuating the functional units, which are arranged together with the core pump (24) in the free space (52) between the two longitudinal side members (50),
~~thereby characterized,~~
~~that wherein~~ the building frame (22) comprises a floating bearing (54) linking said side members across the free space, as well as a fixed bearing (56) arranged at the rear end of the building frame for releasably supporting the core pump, which is pre-assembled in modular manner, and the material supply container (32) rigidly connected with the core pump.

2. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 1,
~~thereby characterized,~~

~~that~~ wherein the prefabricated core pump (22) can be introduced from the back end of the building frame (22) through the free space (52) and is connectable with the bearings (54, 56).

3. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 1 ~~or 2~~,
~~thereby characterized,~~
~~that~~ wherein the building frame (22) includes slide rails leading to the bearings for facilitating the installation and removal of the core pump (24).
4. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 1 ~~one of Claims 1 through 3~~,
~~thereby characterized,~~
~~that~~ wherein the floating bearing (54) is a cross beam, bridging over the free space (52), upon which the core pump (24) rests.
5. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 1 ~~one of Claims 1 through 4~~,
~~thereby characterized,~~
~~that~~ wherein the core pump (24) is supported, in the area of the floating bearing (24), on the sides against the longitudinal side members (50), preferably by rubber elastic vibration absorbers.

6. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 1 ~~one of Claims 1 through 5~~,
~~thereby characterized,~~
~~that~~ wherein the core pump (24) is secured against lifting off from the floating bearing (54).
7. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 6,
~~thereby characterized,~~
~~that~~ wherein, for securing against lifting off, the core pump (24) is connectable with the floating bearing (54) by a capture or lock mechanism connection, preferably a capturing hook (56), bent lever (56'), latch pin (56"), or plug wedge (56'").
8. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 1 ~~one of Claims 1 through 7~~,
~~thereby characterized,~~
~~that~~ wherein the core pump is a hydraulically driven piston pump, resting with its water box (28) upon the floating bearing (54).
9. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 1 ~~one of Claims 1 through 8~~,
~~thereby characterized,~~

~~that~~ wherein the floating bearing (54) is positionable upon the longitudinal side members (50) in various locations spaced apart from each other in the longitudinal direction.

10. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 4 ~~one of Claims 4 through 9~~,
~~thereby characterized,~~
~~that~~ wherein the cross beam forming the floating bearing (54) is rigidly connected to the longitudinal side members (50), preferably by threaded fastener or welding.
11. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 1 ~~one of Claims 1 through 10~~,
~~thereby characterized,~~
~~that~~ wherein the material supply container includes at least one extension arm (59) releasably and rigidly connectable with the fixed bearing (56) of the building frame (22).
12. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 11,
~~thereby characterized,~~
~~that~~ wherein the fixed bearing (56) includes a preferably rubber elastic cushioning or shock absorbing element.
13. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 1 ~~one of Claims 1 through 12~~,

~~thereby characterized,~~

that wherein the building frame (22) includes mounting means (62) for releasably receiving carrier frames (48) of various sizes, the carrier frames bridging over the free space (52), and modularly equippable with various drive subassemblies.

14. (currently amended) A mobil ~~Mobile~~ concrete pump comprising a building frame (22) adapted to be seated on a structure (12) of a truck chassis (10) and comprising two longitudinal side members (50) mutually spaced apart by a free space (52) and resting on said chassis structure (12), for receiving a supporting device (38), a core pump (24) with material supply container (32) and functional units which form a distribution mast (36), as well as a driving assembly (42) for actuating the functional units, which are arranged with the core pump (24) in the free space zone (52) located between the two longitudinal side members (50),

~~thereby characterized,~~

that wherein the building frame (22) comprises mounting means (62) designed to releasably support carrier frames (48) of different sizes which carrier frames bridge over said side members across the free space (52) and which carrier frames may be equipped in modular manner with various drive subassemblies (42).

15. (currently amended) The mobile ~~Mobile~~ concrete pump according to Claim 1 ~~one of Claims 1 through 14~~, ~~thereby characterized,~~
~~that~~ wherein hydraulic and/or electric control and circuit elements for the drive subassemblies and for the functional units connected thereto are assembled into a control module (94) provided at the rearward area of the building frame (22).
16. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 14, ~~thereby characterized,~~
~~that~~ wherein the control module (94) includes assembled hydraulic valves and/or a hydraulic reservoir (97) assembled into a hydraulic controlled block (94) as necessary for control.
17. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 15 ~~or 16~~, ~~thereby characterized,~~
~~that~~ wherein the hydraulic lines leading from the control module (94) to the drive subassemblies (42) run on the longitudinal side members (50) of the building frame (22).
18. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 1 ~~one of Claims 1 through 17~~, ~~thereby characterized,~~

~~that~~ wherein the inner surfaces (60) of the longitudinal side members (50) facing the free space (52) are each provided with a rigidly connected mounting rail (62) extending in the longitudinal direction, that at least two journal bearings (58) are provided spaced apart from each other on the longitudinal side members (50) projecting transverse in the free space (62) for receiving the carrier frame (48) for the drive subassemblies (52) and that the journal bearings (58) each carry a base plate (66), with which they are releasably securable to the mounting rails (62).

19. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 18,
~~thereby characterized,~~

~~that~~ wherein the mounting rails (62) include screw bore holes (64) open transverse to the free space (52) provided spaced apart from each other in the longitudinal direction in defined detent separations, and that the base plates (66) exhibit at least two through holes (68) provided spaced apart from each other corresponding to the detent separation of the screw bore holes (64) for securing screws (70).

20. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 19,
~~thereby characterized,~~

~~that~~ wherein the mounting rails (62) have a square cross section profile, and that the base plates (66) on their broad side opposite to the journal bearings (58) exhibit an edge open profile recess (72) complimentary to the square profile, with which they are form fittingly seatable upon the mounting rails (62) and securable thereto via the securing screws (70).

21. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 20,
~~thereby characterized,~~
~~that~~ wherein the journal bearings (58) are provided eccentrically relative to the profile recess (72) and, in the longitudinal direction, are preferably centrally located on the base plate (66).
22. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 20 ~~or 21~~,
~~thereby characterized,~~
~~that~~ wherein the through holes (68) are provided centrally relative to the profile recess (72), and eccentrically in the longitudinal direction, spaced apart from the journal bearings, on the base plate (66).
23. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 18 ~~one of Claims 18 through 22~~,
~~thereby characterized,~~

~~that~~ wherein the journal bearing (58) is welded to the base plate (66).

24. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 23, ~~thereby characterized,~~
~~that~~ wherein the journal bearing (58) includes a flange (74) and a backwards facing plug pin (76) and is inserted with the plug pin (76) in the bore (78) of the base plate (66) until abutment with the flange (74), and in this position is welded with the base plate.
25. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 18 ~~one of Claims 18 through 24,~~
~~thereby characterized,~~
~~that~~ wherein the mounting rails (62) are welded to the longitudinal side members (50).
26. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 18 ~~one of Claims 18 through 25,~~
~~thereby characterized,~~
~~that~~ wherein a bearing eye (84) is seated on each journal bearing (58), which is securable to the carrier frame (48). preferably by screwing.
27. (currently amended) The mobile concrete ~~Concrete~~ pump according to Claim 26,

~~thereby characterized,~~

that wherein the bearing eye (84) is padded towards the journal bearing with a preferably elastic deformable plastic material (92).

28. (currently amended) A building ~~Building~~ frame for concrete pumps with two longitudinal side members (50) provided spaced apart sideways from each other, thereby forming a free space (52) for receiving a core pump (24), to which side members respectively at least two journal bearings (58) are provided, spaced apart from each other, projecting transverse in the free space (52), for receiving a carrier frame for a drive subassembly (42),

~~thereby characterized,~~

that wherein on the free space (52) facing inner surface (60) of the longitudinal side members (50) respectively one mounting rail (62) is rigidly provided extending in the longitudinal direction, and that the journal bearing (58) respectively carries a base plate (66), with which it is releasably securable to the mounting rails (62).

29. (currently amended) The building ~~Building~~ frame according to Claim 28,

~~thereby characterized,~~

that wherein the mounting rails (62) include multiple screw holes (64), open transverse to the free space (52), spaced apart from each other in the longitudinal direction in

defined locking or detent separations, and that the base plates (66) include at least two through holes (68) for securing screws (70) provided spaced apart from each other in the same detent separation as the screw bore holes (64).

30. (currently amended) The building ~~Building~~ frame according to Claim 29,
~~thereby characterized,~~
that wherein the mounting rails (62) have a square profile, and that the base plates (66) exhibit on their broad side opposite to the journal bearing (58) an edge open profile recess (72) complimentary to the square cross section, with which they are form-fittingly seatable upon the mounting rails (62) and securable thereto with securing screws (70).
31. (currently amended) The building ~~Building~~ frame according to Claim 30,
~~thereby characterized,~~
that wherein the journal bearings (58), are located eccentric with regard to the profile recess (72), and are provided preferably central in the longitudinal direction on the base plate (66).
32. (currently amended) The building ~~Building~~ frame according to Claim 30 ~~or 31~~,
~~thereby characterized,~~

~~that~~ wherein the through hole (68) is centrally located with regard to the profile recess (72) and eccentric in the longitudinal direction, spaced apart from the journal bearing, on the base plate (66).

33. (currently amended) The building ~~Building~~ frame according to Claim 28 ~~one of Claims 28 through 32~~,
~~thereby characterized,~~
~~that~~ wherein the journal bearing (58) is welded to the base plate (66).

34. (currently amended) The building ~~Building~~ frame according to Claim 33,
~~thereby characterized,~~
~~that~~ wherein the journal bearing (58) includes a flange (74) and a rearwards facing plug pin (76), and is inserted with the plug pin (76) until abutment of the flange (74) in the bore hole (78) of the base plate (66), and there is welded to the base plate.

35. (currently amended) The building ~~Building~~ frame according to Claim 28 ~~one of Claims 28 through 34~~,
~~thereby characterized,~~
~~that~~ wherein the mounting rails (62) are welded to the longitudinal side members (50).

36. (currently amended) The building ~~Building~~ frame according to Claim 28 ~~one of Claims 28 through 35~~, ~~thereby characterized,~~ that wherein on each journal bearing (58) a bearing eye (84) is seated, which is releasably securable, preferably by screwing, upon the carrier frame (48).
37. (currently amended) The building ~~Building~~ frame according to Claim 36, ~~thereby characterized,~~ that wherein the bearing eye (84) is cushioned or padded towards the journal bearings with a preferably elastic deformable plastic material (92).
38. (currently amended) The building ~~Building~~ g frame according to Claim 28 ~~one of Claims 28 through 37~~, ~~thereby characterized,~~ that wherein the free space (52) is bridged over by a cross beam (54) rigidly securable to the longitudinal side members (50), on the inner surface thereof (60), which cross beam forms a floating bearing as support for the core pump (24).
39. (currently amended) A building ~~Building~~ frame for concrete pumps with two longitudinal side members (50) provided spaced apart sideways from each other thereby forming a free space (52) for receiving a core pump (24), to which

side members respectively at least two journal bearings (58) are provided spaced apart from each other projecting transverse in the free space (52) for receiving a carrier frame for a drive subassembly (42),

~~thereby characterized,~~

~~that~~ wherein the free space (52) is bridged over by a cross beam (54) rigidly secured to the inner surface (60) of the longitudinal side member (50), which cross beam forms a floating bearing support for the core pump (24).

40. (currently amended) The building ~~Building~~ frame according to claim 38 ~~or 39~~,

~~thereby characterized,~~

~~that~~ wherein the cross beam (54) is welded to the longitudinal side members (50).

41. (currently amended) The building ~~Building~~ frame according to Claim 38 ~~one of Claims 38 through 40~~,

~~thereby characterized,~~

~~that~~ wherein the cross beam (54) bears a flat plastic coating or layer on its bearing surface.

42. (currently amended) The building ~~Building~~ frame according to Claim 38 ~~one of Claims 38 through 41~~,

~~thereby characterized,~~

~~that~~ wherein the core pump (24) rests upon the cross beam (54) by its water box (28) located between the two drive cylinders (26) and the two conveyor cylinders (30).

43. (currently amended) The building ~~Building~~ frame according to Claim 38 ~~one of Claims 38 through 41~~,
~~thereby characterized,~~
~~that~~ wherein the cross beam includes a securing element for securing of the core pump against lifting.
44. (currently amended) The building ~~Building~~ frame according to Claim 38 ~~one of Claims 38 through 43~~,
characterized by a fixed bearing (56) rigidly connectable with the core pump (24) provided in the longitudinal direction behind a rearward mast support block, preferably in the area of the materials supply container.
45. (currently amended) The building ~~Building~~ frame according to Claim 44,
~~thereby characterized,~~
~~that~~ wherein the fixed bearing (56) includes a coupling mechanism (56a - h) for producing a releasable rigid connection.
46. (currently amended) A concrete ~~Concrete~~ pump for building frame, characterized by one or more of the characteristics disclosed in the specification and/or figures.